*Ionization potential*

**Electron angular momentum**
See also narrower: *Electron spin*
See also related: *Spin–orbit coupling*

**Electron–atom collisions**
Valid heading during volumes 126–130 (1997–June 1999) only
See
*Atomic collisions*
electron–atom
*Electron collisions*
electron–atom

**Electron attachment**
See also related:
*Anions*
*Electron capture*
*Electron detachment*

**Electron backscattering**
See also related: *Secondary electron emission*

**Electron beam**
See *Electron beams*

**Electron beam evaporation**
See also related:
*Electron beams*
*Evaporation*

**Electron beam induced current**
See also related:
*Electron beams*
*Electron beam spectroscopy*
*Scanning electron microscopy*

**Electron beam lithography**
See also related:
*Electron beam resists*
*Electron beams*
*X–ray masks*

**Electron beam resists**
See also related:
*Electron beam lithography*
*Electron beams*

**Electron beams**
See also related:
*Aharonov–Bohm effect*
*Betatrons*
*Cathode ray tubes*
*Electron beam evaporation*
*Electron beam induced current*
*Electron beam lithography*
*Electron beam resists*
*Electron beam spectroscopy*
*Electron collisions*
*Electron diffraction*
*Electron emission*
*Electron microprobe analysis*
*Electron microprobes*
*Electron microscopes*
*Electron microscopy*
*Electron optics*
*Electron–positron colliders*
*Electron–proton colliders*
*Electron radiolysis*
*Electron tubes*
*Free electron lasers*
*Free electrons*
See also *Beta particle [12587–47–2]*

**Electron beam spectroscopy**
See also narrower: *Electron energy loss spectroscopy*
See also related:
*Auger electron spectroscopy*
*Electron beam induced current*
*Electron beams*
*Electron diffractometry*

**Electron beam vapor deposition**
Valid heading during volumes 126–130 (1997–June 1999) only
See *Vapor deposition process*, electron–beam

**Electron beam welding of metals**
Valid heading during volumes 127–130 (July 1997–June 1999) only
See *Welding of metals*, electron–beam

**Electron bubble**
See also related:
*Conduction electrons*
*Electron liquid*
*Solvated electrons*
*Superfluids*

**Electron capture**
See also narrower: *Dissociative electron capture*
See also related:
*Electron attachment*
*Electron–ion recombination*
*Electron transfer*
*Ionization*

**Electron capture decay**
**Electron–capture decay**
See *Electron capture decay*

**Electron capture detectors**

**Electron–cluster collisions**
Valid heading during volumes 126–130 (1997–June 1999) only
See
*Cluster collisions*
electron–cluster
*Electron collisions*
electron–cluster

**Electron collisions**
See also narrower:
*Electron attachment*
*Electron backscattering*
*Electron impact dissociation*
*Electron impact excitation*
*Electron impact ionization*
See also related:
*Electron beams*
*Electron–phonon scattering*

**Electron configuration**
See also narrower:
*Electron hybridization*
*Lone–pair electrons*
*Pi electrons*
See also related:
*Atomic orbital*
*Electron correlation*
*Electron density*
*Isoelectronic sequence*
*Valence*

**Electron configuration and Electron density**
See *Electron configuration*

**Electron correlation**
See also related:
*Correlation energy*
*Dispersion potential*
*Electron configuration*
*Electron density*
*Electronic state*
*Exchange–correlation potential*
*Lattice models*

**Electron crystal**
See *Electron crystals*

**Electron crystals**
See also related:
*Electron gas*
*Electron liquid*

**Electron cyclotron masers**
See *Cyclotron masers*

**Electron cyclotron resonance**
See also related:
*Cyclotron masers*
*Ion cyclotron resonance*

**Electron delocalization**
See also related:
*Conjugation (bond)*
*Delocalization energy*
*Electron density*
*Electron hybridization*
*Electron localization*

**Electron density**
See also narrower:
*Electron momentum density*
*Valence electron density*
See also related:
*Bond order*
*Charge density wave*
*Electron configuration*
*Electron correlation*
*Electron delocalization*
*Electron localization*
*Electron spin density*
*Electrostatic charge*
*Nephelauxetic effect*
*Plasma*
*Surface electric charge*
*Valence*

**Electron detachment**
See also narrower: *Electron photodetachment*
See also related:
*Electron attachment*
*Ionization*

**Electron detectors**
See also related:
*Electron microscopes*
*Electron optics*

**Electron diffraction**
See also narrower: *Photoelectron diffraction*
See also related:
*Crystal structure*
*Debye–Waller factor*
*Electron beams*
*Electron diffractometry*
*Electron microscopes*
*Electron microscopy*
*Electron optics*
*Metallography*
*Surface structure*
*X–ray diffraction*

**Electron diffractometry**
See also narrower:
*Convergent beam electron diffractometry*
*Photoelectron diffractometry*
*Transmission electron diffractometry*
See also related:
*Auger electron spectroscopy*
*Electron beam spectroscopy*
*Electron diffraction*
*Photoelectron spectroscopy*

**Electron donors**
See also narrower:
*Deep donors*
*Shallow donors*
*Thermal donors*
See also related:
*Acidity*
*Defect level*
*Donor levels*
*Dopants*
*Electric activation (dopants)*
*Electron acceptors*
*Electron transfer*
*Electron traps*
*Exciplex*
*Hole traps*
*Inductive effect*
*Localized electronic state*

**Electronegativity**
See also related:
*Bond*
*Electron affinity*
*Electrophilicity*
*Hardness (electronic structure)*
*Ionization potential*
*Nucleophilicity*

**Electron emission**
See also narrower:
*Auger process*
*Exoelectron emission*
*Field emission*
*Photoemission*
*Secondary electron emission*
*Thermionic emission*
See also related:
*Autoionization*
*Beta decay*
*Cathodes*
*Electron beams*
*Electron emission spectroscopy*
*Electron internal conversion*
*Electron–positron pair*
*Electron sources*
*Electron tubes*
*Emission spectra*
*Hot electrons*
*Ion emission*
*Ionization*

**Electron emission spectroscopy**
See also narrower:
*Auger electron spectroscopy*
*Photoelectron spectroscopy*
See also related:
*Electron emission*
*Electron spectrometers*

**Electron emission x–ray analysis**
See *X–ray photoelectron spectroscopy*

**Electron energy loss spectroscopy**

**Electron exchange**
See *Electron transfer*

**Electron exchange and Charge transfer**
See *Electron transfer*

**Electron exchange catalysts**
See *Electron transfer catalysts*

**Electron exchangers**
See also related:
*Oxidizing agents*
*Redox agents*
*Reducing agents*

**Electron gas**
See also narrower:
*One–dimensional electron gas*
*Two–dimensional electron gas*
See also related:
*Cathode ray tubes*
*Charge density wave*
*Electron crystals*
*Electron–hole plasma*
*Electron liquid*
*Fermi fluids*
*Free electrons*
*Heavy fermion systems*
*Hole gas*
*Plasmon*

**Electron guns**
See *Electron sources*

**Electron–hole pairs**
See also related:
*Conduction electrons*
*Exciton*
*Hole (electron)*

**Electron–hole plasma**
See also related:
*Electron gas*
*Electron liquid*
*Free electrons*
*Hole (electron)*
*Hole gas*
*Plasmon*

**Electron–hole recombination**
See also narrower:
*Auger recombination*
*Surface recombination*
See also related:
*Auger process*
*Conduction electrons*
*Electron–ion recombination*
*Exciton*
*Hole (electron)*

**Electron holography**

**Electron hybridization**
See also related:
*Atomic orbital*
*Bond*
*Electron delocalization*

**Electronic device fabrication**
See also narrower: *Semiconductor device fabrication*
See also related:
*Contamination (electronics)*
*Electric apparatus*
*Electronic packaging process*
*Electronics*

**Electronic device packaging**
See
*Electronic packages*
*Electronic packaging materials*
*Electronic packaging process*

**Electronic device quality**
Valid heading during volumes 126–130 (1997–June 1999) only
See *Electronic device fabrication*, quality

**Electronic displays**
See *Optical imaging devices*

**Electronic energy transfer**
See also related:
*Electronic transition*
*Exciton*
*Fluorescence decay*
*Luminescence quenching*
*Photoinduced energy transfer*

**Electronic excitation**
See also narrower:
*Inner shell excitation*
*Photoexcitation*
*Rydberg state excitation*
*Singlet state excitation*
*Triplet state excitation*
See also related:
*Electron impact excitation*
*Fluorescence excitation*
*Interband transition*
*Optical absorption*
*Singlet–triplet transition*
*UV absorption*
*UV and visible spectra*
*Vibronic excitation*

**Electronic ground state**
See *Ground state*

**Electronic heat capacity**
Valid heading during volumes 129–130 (July 1998–June 1999) only
See *Heat capacity*, electronic